SEP 1 3 2011

Appendix G - 510(k) Summary for the Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms

### I. General Information

Sponsor Sponsor/ 510(k) Owner Alma Lasers, Inc. 485 Half Day Rd. Suite No. 100 Address and Buffalo Grove, IL 60089, USA Establishment Registration # FDA Registration #: 3004167969 Tatiana Epstein Telephone: (224) 377-2011 Contact VP QA&RA (224) 377-2050 Facsimile: Alma Lasers, Inc. Email: Tatiana.epstein@almalasers.com Person:

Summary Preparation Date: September 13, 2011

II. Names

Device Names: Alma Lasers Modified Diode Laser Module with SHR

Treatment Mode for use with the Family of Soprano XL

Multi-Application Platforms

Primary Classification

Names: Laser Powered Surgical Instruments (and accessories)

Regulation Number: 21 CFR 878.4810

Regulation Name: Laser surgical instrument for use in general and plastic

surgery and in dermatology

Regulatory Class: Class II Product Code: GEX

#### III. Predicate Devices

Modified Alma Lasers Family of Soprano Multi-Application Platforms [Soprano XL<sup>TM</sup>, Soprano XLi<sup>TM</sup>] (K102716)

Alma Lasers Soprano XL Multi-Application Platform (K083848)

## IV. Product Description

The Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms, and the delivery accessories that are used with it, is comprised of the following main components:

- A module housing with:
  - Module trigger switch (must be pressed at the same time the Soprano system footswitch is depressed to deliver laser energy to the treatment site);
  - > Light guide
    - TEC-cooled to provide contact skin cooling
  - > Light guide retainer
- Umbilical cable and connector that attaches the Diode Laser Module to the Soprano system console and includes the electrical and cooling connections to the Soprano system.

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## V. Indications for Use

The Alma Lasers Family of Soprano XL Multi-Application Platforms is intended for use in dermatologic and general surgical procedures.

The Alma Lasers Modified Diode Laser Module (used with the Alma Lasers Family of Soprano XL Multi-Application Platforms):

- The HR Mode is intended for hair removal, permanent hair reduction.
- The SHR Mode is intended for hair removal, permanent hair reduction.
- The LaserBlanche Mode is intended for the treatment of benign vascular and pigmented lesions.

The Alma Lasers Family of Soprano XL Multi-Application Platforms is intended for use on all skin types (Fitzpatrick skin types I-VI), including tanned skin.

# VI. Rationale for Substantial Equivalence

The Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms shares the same indications for use, device operation, technical and functional capabilities, and therefore is substantially equivalent to the predicate Modified Alma Lasers Family of Soprano Multi-Application Platforms [Soprano XL<sup>TM</sup>, Soprano XLi<sup>TM</sup>] (K102716) and the Alma Lasers Soprano XL Multi-Application Platform (K083848).

Parameter	K11Alma Lasers Modified Diode Laser Mode with SHR Treatment Mode used with the Soprano XL Multi-Application Platforms			K102716 Modified Alma Lasers Family of Soprano Multi-Application Platforms [Soprano XL <sup>TM</sup> , Soprano XLi <sup>TM</sup> ]		K083848 Alma Lasers Soprano XL Multi- Application Platform	
Diode Module Mode	SHR Mode	HR Mode	LB Mode	HR Mode	LB Mode	HR Mode	
Laser Wavelength	810 nm (nominal)			810 nm (nominal)		810 nm (nominal)	
Indications for Use	Intended for hair removal, permanent hair reduction		Intended for treatment of benign vascular and pigmented lesions	Intended for hair removal, permanent hair reduction	Intended for treatment of benign vascular and pigmented lesions	Intended for hair removal, permanent hair reduction	
Soprano System Indications for Use	<ul> <li>Intended for use in dermatologic and general surgical procedures</li> <li>Intended for use on all skin types (Fitzpatrick skin types I-VI), including tanned skin.</li> </ul>						
Spot Size	1.2 cm <sup>2</sup>			1.2 cm <sup>2</sup>		1.2 cm <sup>2</sup>	
Fluence (Energy Density)	$\leq 10 \text{ J/cm}^2$	≤ 120 J/cm <sup>2</sup>	≤ 80 J/cm <sup>2</sup>	≤ 120 J/cm <sup>2</sup>	≤ 80 J/cm <sup>2</sup>	≤ 120 J/cm <sup>2</sup>	
Rep Rate	≤ 10 Hz	≤ 3 Hz		≤ 3 Hz		≤3 Hz	
Pulse Duration	≤ 20 ms	20 ms 5-200 ms		5-200 ms		5-200 ms	
Compatible Laser Syst.	Used with Family of Soprano XL Multi- Application Platforms			Family of Soprano XL Multi- Application Platforms		Soprano XL System	

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# VII. Safety and Effectiveness Information

The review of the indications for use and technical characteristics provided demonstrates that the Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms is substantially equivalent to the predicate Modified Alma Lasers Family of Soprano Multi-Application Platforms [Soprano XL<sup>TM</sup>, Soprano XLi<sup>TM</sup>] (K102716) and the Alma Lasers Soprano XL Multi-Application Platform (K083848).

In addition, published peer-reviewed medical literature provided device validation information demonstrating that the changes do not raise new questions of safety or effectiveness.

The supporting published information reported on clinical studies in 2,879 patients demonstrating the safety and effectiveness/performance of the 810 nm Diode Laser Module handpiece and the SHR Treatment Mode (used with the Soprano system console) for hair removal and permanent hair reduction.

These studies reported on the safety and effectiveness/performance immediately following treatment and at 1, 6, and 18 months following treatment with the 810 nm Diode Laser Module handpiece and the SHR treatment Mode (used with the Soprano system console) using the low fluence, high repetition rate, multiple-pass treatment regimen.

#### VIII. Conclusion

The Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms was found to be substantially equivalent to the predicate devices.

The Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms shares the same or similar indications for use, similar design features, and functional features with, and thus is substantially equivalent to the predicate devices.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Alma Lasers, Inc. % A. Worden Consulting Ms. Anne Worden 485 Half Day Road, Suite 100 Buffalo Grove, Illinois 60089

SEP 13 2011

Re: K112031

Trade/Device Name: Alma Lasers Modified Diode Laser Module with SHR Treatment

Mode for use with the Family of Soprano XL Multi-Application

Platform

Regulation Number: 21 CFR 878,4810

Regulation Name: Laser surgical instrument for use in general and

plastic surgery and in dermatology

Regulatory Class: Class II

Product Code: GEX Dated: July 13, 2011 Received: July 15, 2011

Dear Ms. Worden:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Mark N. Melkerson

Director

Division of Surgical, Orthopedic and Restorative Devices Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

P51 of 1

510(k) Number (if known): <b>K11203</b> 1
Device Name: Alma Lasers Modified Diode Laser Module with SHR Treatment Mode for use with the Family of Soprano XL Multi-Application Platforms
Indications for Use:
The Alma Lasers Family of Soprano XL Multi-Application Platforms is intended for use in dermatologic and general surgical procedures.
<ul> <li>The Alma Lasers Modified Diode Laser Module (used with the Alma Lasers Family of Soprano XL Multi-Application Platforms):</li> <li>The HR Mode is intended for hair removal, permanent hair reduction.</li> <li>The SHR Mode is intended for hair removal, permanent hair reduction.</li> <li>The LaserBlanche Mode is intended for the treatment of benign vascular and pigmented lesions.</li> </ul>
The Alma Lasers Family of Soprano XL Multi-Application Platforms is intended for use on all skin types (Fitzpatrick skin types I-VI), including tanned skin.
Prescription Use AND/OR Over-The-Counter Use (21 CFR 801 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)    Concurrence of CDRH, Office of CDRH, Office ODE)    Concurrence of CDRH, Office of CDRH, Office ODE)    Concurrence of CDRH, Office of CDRH, Office ODE)    Concurrence of CDRH, Office ODE)   Concurrence of
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Page 1 of 1